

REMARKS

The Applicant would like to thank the Examiner for discussing this case on February 12, 2007. The discussions involved §112 issues with respect to new claim language for claim 11 and did not address the allowability of the claims over the prior art.

Claim Rejections-35 U.S.C. §112

Claim 11 has been substantially amended to eliminate the terms objected to in this rejection. For reasons provided below, it is believed to claim 11 is now properly supported by the specification and allowable over the prior art.

Claim Rejections-35 U.S.C. §102

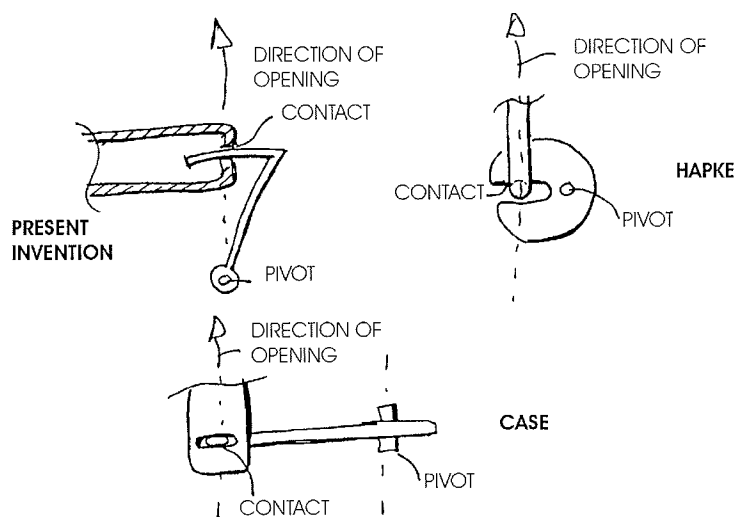
Claim 11

Claim 11 has now been amended to remove the characterizations of torque on the recited hook in favor of a structural recitation of the location of the pivot point of the hook with respect to the hook's contact with the lid.

It is believed that this new formulation distinguishes over the art of record and specifically over the Hapke reference which shows a pivot point displaced to the side of the contact point with respect to a direction of opening on the lid (so that the opening of the lid tends to rotate the hook) and over the Case reference which also shows a pivot point displaced to the side of the contact point with respect to a direction of opening of the lid (so that the opening of the lid tends to twist the hook arm). As a result neither of these references provides the beneficial feature of the present invention in allowing a force of opening of the lid to be received by the pivot without rotational force on the pivot.

This benefit is described in the present application at page 4, paragraph 8 (paragraph [0018] of the published application) and page 5, paragraphs 1 and 3 (paragraph [0020] and [0022] of the published application) and generally allow the construction of a lid latch that requires only support of the hook at the pivot point.

These distinctions are summarized in the following diagrams:



Thus it is believed that the prior art references do not show a "pivot point and contact point ...in a line along the direction of opening" as required by amended claim 11.

Support for these new claim limitations are found throughout the application but specifically in the discussion of Figs. 2 and 8. The specification at page 12, the third paragraph (paragraphs [0068] of the published application) describes the "rotation axis 44" (being the pivot point in the claims) being directly below the "point of engagement" of the hook and the lid (being the contact point of the claims) with respect to "upward motion of the lid along tangent 140". The alignment between the pivot point and the contact point along the direction of opening would also be understood from the discussions of torques at the fourth paragraph (paragraphs [0069] of the published application) to one of ordinary skill in the art.

Claim 17

Claim 17 has been amended in light of the prior art by incorporating the limitations of claims 21 and 22 and further by indicating that the sliding contact moves with respect to a stationary contact with rotation of the hook and that the cam surface interacting with the sliding contact is stationary.

The unamended claim 17 had been rejected over the Paul reference. In contrast to the amended claim 17, Paul shows a camming surface 14 that moves with respect to all contacts. Further the contacts in Paul do not slide laterally, one with respect to the other along the plane of contact (except perhaps minimally) but rather are moved transversely to open and close with

motion of a movable cam. In Paul, there is no sliding contact that slides with respect to a stationary contact and thus there is no overtravel of the sliding contact.

It is therefore believed that Paul can be distinguished from claim 17 because Paul does not include "a sliding contact moving laterally over a stationary contact along a plane of contact between the sliding contact and stationary contact" and there is no "stationary contact positioned next to a stationary cam surface" nor does Paul have a "stationary cam surface engaging the sliding contact with overtravel of the sliding contact to lift the sliding contact transversely away from the stationary contact" as required by amended claim 17.

A benefit of this invention is that it allows sliding contacts (which provide a wiping contact motion known to improve the electrical connection between the contacts) while permitting the detection of extremely small motions with high precision. This benefit is described generally at page 6, paragraph 3 of the specification (paragraph [0032] of the published application).

Support for these limitations are found throughout the specification and particularly with respect to the discussion of Figs. 5, 9, 10 and 11. Page 9, paragraphs 3 and 4 (paragraphs [0053]-[0054] of the published application) describe lateral movement of a sliding contact (throws 54) over stationary contacts (throw pads 72) with movement of the hook 30. Page 12, paragraph 5 through page 13, paragraph 2 (paragraphs [0070]-[0072] of the published application) indicate the lateral sliding of the contacts 159 is perpendicular to the transverse separation of the contacts 162 during overtravel. This lateral motion is clearly along the plane of contact between the contacts, and the fact that the cam surface is stationary is evident from the described operation and from the fact that the cam surface is "formed of the material of the housing 48 also supporting stationary contact 72". The remaining limitations were found in claims 21 and 22 forming part of the specification at the time of filing.

In light of these comments and amendments, it is believed that claims 11-14, 16-19, and 22-24 are now in condition for allowance and allowance is respectfully requested.

The Commissioner is hereby authorized to deduct any fees arising as a result of this or any other communication from Deposition Account 50-1170.

Respectfully submitted,

KENYON A. HAPKE

By: 

Keith M. Baxter

Reg. No. 31,233

Attorney for Applicant

Boyle, Fredrickson, Newholm, Stein & Gratz

250 East Wisconsin Avenue, Suite 1030

Milwaukee, WI 53202

414 225-9755

Dated: February 23, 2007